IS: 6203 - 1971 (Reaffirmed 2002) (Reaffirmed 2012)

(Reaffirmed 2017)

SPECIFICATION FOR SHIP'S ROUND EYE PLATES

Indian Standard

UDC 629.12.014.24





© Copyright 1972

INDIAN STANDARDS INSTITUTION

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI I

Price Rs. 2.00

January 1972



Indian Standard SPECIFICATION FOR SHIP'S ROUND EYE PLATES

Shipbuilding Sectional Committee, MCPD 1

Representing

SHRIS. PARMANANDHAN

Ministry of Defence (NHQ)

CDR S. P. AGARWALA

Ministry of Defence (DGI)

Voltas Ltd, Bombay

SHRI N.BALASUBRAMANIAM SHRIR. S. MITAL (Alternate)

SHRI A. S. BONDALE

Garden Reach Workshops Ltd, Calcutta

MECHANICAL ENGINEER, Inter Port Consultation Secretariat Cell, Calcutta THE COMMISSIONERS FOR THE

PORT OF CALCUTTA

CHIEF MECHANICAL ENGI-NEER, BOMBAY PORT TRUST (Alternate)

SHRIP. L. D' ABREO

Kamath & D' Abreo, Cochin

SHRI R. A. KAMATH (Alternate)

SHRI V. G. DAMLE AFCO Ltd, Bombay

SHRIR. D. PARALKAR (Alternate)

DIRECTOR OF NAVAL CONSTRUC- Ministry of Defence (NHQ)

SHRIB. HILL

SHRID. B. IRANI

Lloyd's Register of Shipping, Calcutta

Directorate General of Shipping (Ministry of Parliamentary Affairs, Shipping and Transport),

Bombay

SHRI KJELL LINDH SF India Ltd, Calcutta

SHRI G. SINHA (Alternate) SHRIG. K. KURIYAN

SHRI M. VELU (Alternate)
SHRI S. MAJUMDAR

SHRIK. N. G. MENON

DR T. S. RAGHURAM

Central Institute of Fisheries Technology, Ernakulam

Directorate General of Technical Development The Shipping Corporation of India Ltd, Bombay; and

The Institute of Marine Engineers, Bombay

The Shipping Corporation of India Ltd, Bombay

The Institute of Marine Engineers, Bombay

The Institute of Marine Engineers, Bombay

The Indian National Shipowners' Associa CAPT R. D. KOHLI (Alternate) SHRI B. S. SOOD (Alternate)

SHRI I. N. PRADHAN

The Bombay Indian Engineering Association, Bombay

SHRIT. S. RAJAN Ericson & Richards, Bombay SHRIS. A. H. RIZVI

The Institute of Marine Engineers, Bombay Institution of Marine Technologists, Bombay SHRI ANJAN ROYE

SHRIK. N. G. MENON (Alternate) SHRI E. R. DASTOOR (Alternate)

Hindustan Shipyard Ltd, Visakhapatnam SHRI D. S. SHETH

SHRI M. G. KUTTY (Alternate)

(Continued on page 2)

Association,

INDIAN **STANDARDS** INSTITUTION MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 1

IS: 6203-1971

(Continued from page 1)

Members

Representing

SHRI T. N. SUJAN
SHRI K. E. VERGHESE
SHRI T. R. VENKATESAWARAN
SHRI K. S. SUBRAMANIAM,
Officer on Special Duty (Secretary)

Indian Standard SPECIFICATION FOR SHIP'S ROUND EYE PLATES

0. FOREWORD

- **0.1** This Indian Standard was adopted by the Indian Standards Institution on 9 August 19-71, after the draft finalized by the Shipbuilding Sectional Committee had been approved by the Marine, Cargo Movement and Packaging Division Council.
- **0.2** Eye plates are provided on the topmost deck and at other decks as required, to secure guy ropes from masts, derrick posts, etc.
- **0.3** Eye plates are provided with the sole plates to strengthen and increase the contact area, and are either directly revitted to deck or welded to deck.
- **0.4** In the preparation of this standard, assistance has been derived from DIN 82024 'Round eye plates', issued by Deutscher Normenausschuss.
- 0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS: 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard specifies the material and dimensions for ship's round eye plates.

2. TERMINOLOGY

- 2.0 For the purpose of this standard, the following definition shall apply.
- 2.1 Safe Working Load The safe working load of the round eye plate is the maximum tensile load likely to occur in the guy ropes attached to the eye plate. If more than one rope is secured to the eye plate, the sum of the maximum tensile load on each of the rope, is the safe working load of the round eye plate.

^{*}Rules for rounding off numerical values (revised).

IS: 6203 - 1971

3. MATERIAL

- 3.1 Ship's round eye plates shall be made from any of the following material:
 - a) Carbon steel forgings conforming to IS: 3261-1966*
 - b) Structural steel conforming to IS: 3039 1965†.

4. SHAPE AND DIMENSIONS

4.1 The shape and dimensions of the ship's round eye plates together with sole plate shall be as given in Table 1.

5. TOLERANCES

5.1 The tolerances on dimensions shall be of coarse series according to IS: 2102-1969‡.

6. MARKING

- **6.1** Each eye plate shall be marked legibly and indelibly with the manufacturers identification mark, and the safe working load.
- **6.1.1** Round eye plates may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

^{*}Specification for carbon steel forgings for shipbuilding industry.

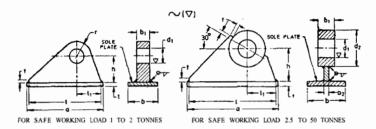
[†]Specification for structural steel (shipbuilding quality).

[‡]Allowable deviations for dimensions without specified tolerances (first revision).

TABLE 1 DIMENSIONS FOR SHIP'S ROUND EYE PLATES TOGETHER WITH SOLE PLATE

(Clause 4.1)

All dimensions in millimetres.



| SAFE WORKING | b_1 | b_2 | d_1 | d_1 | f | h | 1 | I_1 | r | SC | DLE PLAT | E | THROAT THICK- |
|-------------------|-------|-------|-------|-------|----|-----|-----|-------|----|-----|----------|----|------------------|
| LOAD IN TONNES | | | | | | | | | | a | b | t | NESS OF WELD |
| 1.0 | 16 | _ | 18 | _ | 4 | 32 | 85 | 28 | 18 | 90 | 40 | 6 | 3 |
| 1.6 | 20 | | 22 | _ | 5 | 40 | 110 | 36 | 22 | 115 | 45 | 6 | 4 |
| 2.0 | 22 | _ | 24 | _ | 5 | 44 | 120 | 40 | 24 | 125 | 50 | 6 | 4 |
| 2.5 | 25 | 8 | 27 | 54 | 6 | 48 | 130 | 44 | | 135 | 55 | 8 | 5 |
| 3.2 | 28 | 8 | 30 | 60 | 6 | 54 | 145 | 48 | | 150 | 65 | 8 | 5 |
| 4.0 | 30 | 8 | 34 | 68 | 7 | 60 | 155 | 52 | _ | 165 | 70 | 10 | 5 |
| 5.0 | 35 | 10 | 37 | 74 | 8 | 72 | 180 | 64 | _ | 190 | 80 | 10 | 6 |
| 6.3 | 40 | 10 | 40 | 80 | 9 | 78 | 200 | 68 | | 210 | 90 | 10 | 6 |
| 8.0 | 45 | 12 | 46 | 92 | 10 | 90 | 230 | 76 | _ | 240 | 105 | 12 | 7 |
| 10.0 | 50 | 14 | 51 | 102 | 11 | 96 | 260 | 88 | _ | 270 | 115 | 14 | 7 |
| 12.5 | 55 | 14 | 56 | 112 | 12 | 104 | 290 | 96 | - | 300 | 130 | 16 | 8 |
| 16.0 | 60 | 16 | 64 | 128 | 13 | 120 | 310 | 104 | | 325 | 140 | 18 | 8 |
| 20.0 | 65 | 20 | 70 | 140 | 14 | 136 | 340 | 120 | _ | 355 | 150 | 20 | 9 |
| 25.0 | 70 | 20 | 79 | 158 | 15 | 144 | 360 | 128 | _ | 380 | 160 | 22 | 10 |
| 32.0 | 80 | 20 | 85 | 170 | 17 | 160 | 410 | 136 | | 430 | 190 | 25 | 11 |
| 40.0 | 90 | 25 | 93 | 186 | 19 | 180 | 460 | 152 | | 480 | 210 | 28 | 13 |
| 50.0 | 100 | 25 | 101 | 202 | 21 | 200 | 500 | 168 | _ | 525 | 235 | 32 | 14 |

PUBLICATIONS OF INDIAN STANDARDS INSTITUTION

INDIAN STANDARDS

Over 6500 Indian Standards covering various subjects have been issued so far. Of these, the standards belonging to the Marine, Cargo Movement and Packaging Group fall under the following categories:

| MARINE | Ventilation Miscellaneous |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Authors and anchor cables Diesel engines | CARGO MOVEMENT |
| Distress signals Fire safety Inland vessels | Cargo marking Industrial trucks, tractors and trailers Pallets |
| Life saving equipment & accessories Magnetic compase Mooring equipment Navigational lights Printing Systems, valves and accessories Ship's derricks and accessories Step's side scuttles & windows | PACKAGING Glass containers Metal containers Paper and flexible packaging Plastics containers Wood and wood produces containers |

OTHER PUBLICATIONS

| ISI Bulletin (Published Every | Mon | th) | | | | |
|--------------------------------|--------|---------------|-------|-----|-------|---------------------------|
| Single Copy | | | | | | Rs 3. <u>00</u> |
| Annual Subcerlption | | | | ••• | | Rs 25'0O |
| Standards: Monthly Addition | 18 | | | | | |
| Single Copy | | | | | | Re 0 30 |
| Annual Subscription | | , | | | | Re 3 <u>00</u> |
| Annual Reports (from 1948-4 | 9 Onv | vards) | | | Rs 2. | <u>00</u> to 5. <u>00</u> |
| Handbook of ISI Publications | , 1970 | | | | | Rs 12. <u>00</u> |
| Addendum to 'Handbook of | ISI | Publications, | 1970' | | | Rs 2.50 |

INDIAN STANDARDS INSTITUTION

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 1

| Telephone: 2701 31 (20 lines) | Telegrams: Manaksanstha | | | | |
|-------------------------------------------|-------------------------|-----------|--|--|--|
| Branch Offices: | | Telephone | | | |
| 0 - 18 New Civil Hospital Annexe, Asarva | Ahmedabad 16 | | | | |
| F Block, Unity Bldg, Narasimharaja Square | Bangalore 2 | 2 76 49 | | | |
| 534 Sardar Vallabbhai Patel Road | Bombay 7 | 35 69 44 | | | |
| 5 Chowringhee Approach | Calcutta 13 | 23 08 02 | | | |
| 5-4 2012-A (First Floor), Chirag All Lane | Hyderabad 1 | 5 34 35 | | | |
| 117 418 B Sarvodya Nagar | Kanpur 5 | 82 72 | | | |
| 54 General Patters Road | Madras 2 | 8 72 78 | | | |
| | | | | | |

Printed at Arces Press, New Delhi. India

AMENDMENT NO. 1 APRIL 1992 TO IS 6203 :1971 SPECIFICATION FOR SHIP'S ROUND EYE PLATES

[Page 4, clause 3.1 (a) and (b)] — Insert the following for the existing matter

- "a) Carbon steel forgings conforming to IS 3261:1980 'Specification for carbon steel forgings for shipbuilding industry (first revision)
- b) Structural steel conforming to IS 3039:1980 'Specification for structural steels for construction of hulls of ships (first revision) '."

(Page 4, foot-notes marked with '*' and '†' symbols — Delete.

(TED 17)

Reprography Unit, BIS, New Delhi, India